State of Tennessee
Strategic Highway Safety Plan

Tennessee Strategic Highway Safety Committee
Tennessee Department of Transportation
Tennessee Department of Safety
Governor's Highway Safety Office
Federal Highway Administration
Federal Motor Carriers Safety Administration

MISSION: Through coordination of education, enforcement, engineering, and emergency response initiatives reduce the number of crashes that result in fatalities, injuries, and related economic losses on Tennessee's roadways.

VISION: All roadway users arrive safely at their destination.

GOAL: Reduce the fatality rate by 10 percent by the FY 2008-09.

The Tennessee Strategic Highway Safety Plan has been developed under the oversight of the Tennessee Strategic Highway Safety Committee to reduce the number of lives lost, human suffering, and the economic costs associated with motor vehicle crashes in Tennessee. By signing this document, the signatories agree to support the committee mission and the Tennessee Strategic Highway Safety Plan.

_____	_____	_____
Gerald F. Nicely	Fred Phillips	Chuck Taylor
Commissioner	Commissioner	Director
TDOT	TDOS	GHSO

_____	_____
Bobby W. Blackmon	Richard Gobbell
Division Administrator	Division Administrator
FHWA	FMCSA

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Introduction

A Strategic Highway Safety Plan should define a system, organization, and process for managing the attributes of the road, the driver, and the vehicle to achieve the highest level of highway safety by integrating the work of disciplines and agencies involved. These disciplines include the planning, design, construction, operation, and maintenance of the roadway infrastructure (engineering); injury prevention and control (emergency response services), health education; those disciplines involved in modifying road user behaviors (education, enforcement), and the design and maintenance of vehicles. In order to manage this complex system and to achieve the level of integration necessary to meet the highest levels of safety, two key components are needed. The first is an organizational structure that will allow for the integration of the agencies involved in highway safety. The second is a formal management process that will direct the activities of these agencies in a manner that will efficiently achieve the mission and vision.

All parts as described within this plan are necessary, but there is flexibility to customize the structure and process according to external and internal factors. It is anticipated that the plan periodically will be updated and otherwise revised.

From 1998 to 2002, Tennessee experienced an annual average of more than 170,000 reported traffic crashes. In 2002, 74, 814 injuries and 1,175 fatalities occurred on Tennessee's roads. For 2002, the US Department of Transportation estimates that the annual economic loss due to traffic crashes in Tennessee was over $4.6 billion.

Many of these injuries represent extended rehabilitation care costs and loss of productivity. Fatalities are only a small part of the total injury picture. For each injury-related death, there are 19 injury hospitalizations and over 300 injuries that

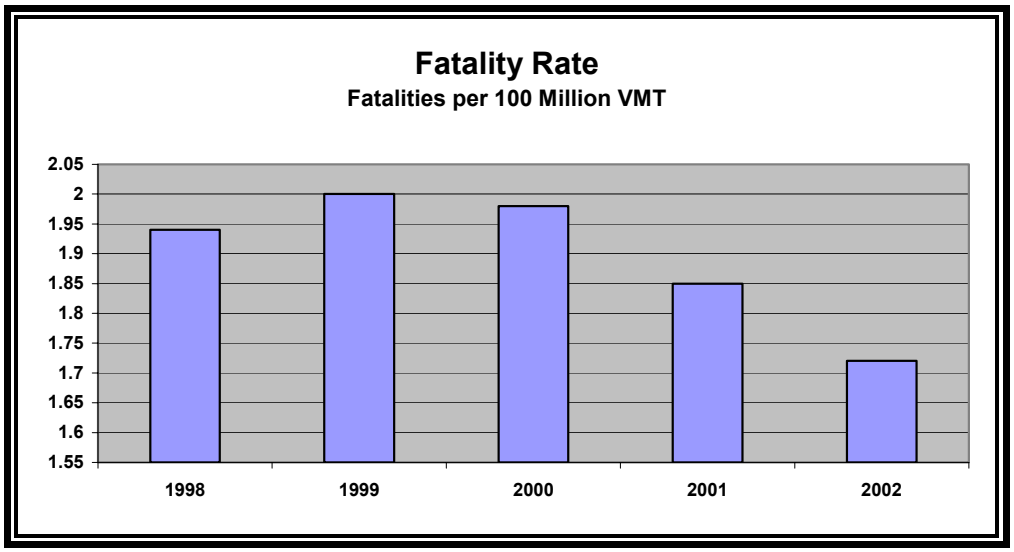
require medical attention. Each year, one in four Americans will have a potentially preventable injury serious enough to require medical care. These injuries account for almost 10% of all physician office visits and 38% of all emergency department visits. For an individual, these injuries vastly diminish quality of life.

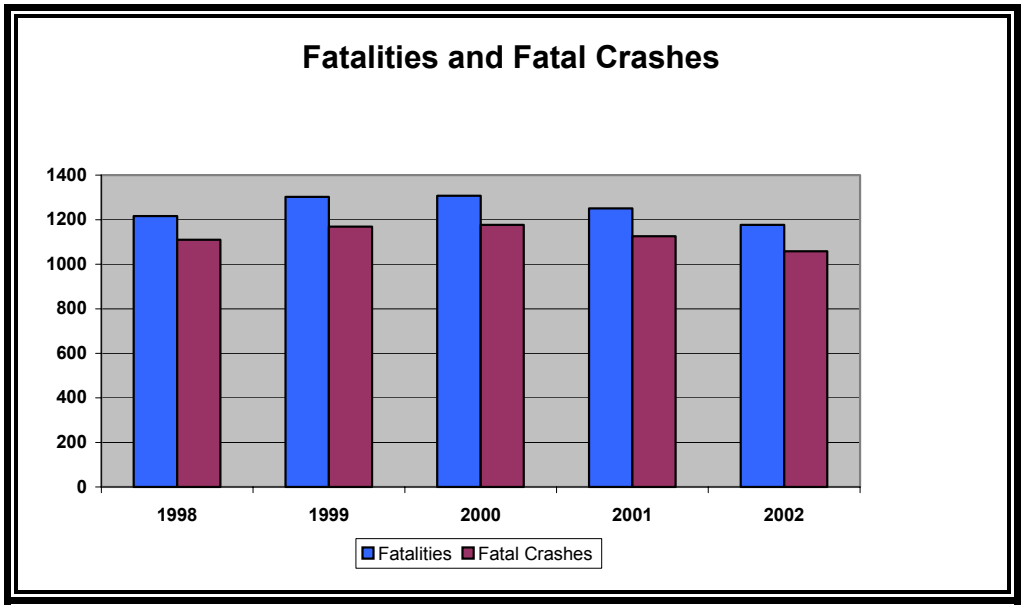
For Tennessee, facing the enormous challenge of reining in our TennCare costs, highway injuries pose a significant drain on the health care system. People who are injured in accidents incur huge treatment, acute care, and rehabilitation costs. The McKenzie December 11 report, *Achieving a Critical Mission in Difficult Times - TennCare's Financial Viability*, identified one aspect of saving TennCare costs related to automobile crashes, where they note that "an auto insurance policy should pay for medical coverage in an auto accident before TennCare does." With a devoted effort to making our highways safer, significant gains should be made by preventing/reducing these costs in the first place. Though data on precise dollar amounts that TennCare incurs due to automobile crashes was not readily available, based on national trends we know that reducing the number and severity of highway injuries will reduce the amount spent here by TennCare to treat highway injuries by several millions of dollars.

The substantial impact within the local community relative to medical costs, lost wages, insurance costs, taxes, police, fire and emergency services, legal and court costs as well as property damage are also significant.

In 2002, Tennessee's fatality rate was 1.72 fatalities per 100 million vehicle miles traveled (VMT), which is above the national average rate of 1.50. Deaths and injuries caused by traffic crashes are a serious public health concern, and are not conducive to the high quality of life expected in this state.

The following charts reflect the recent state trends in fatalities resulting from traffic crashes.





Safety Partners

For the State of Tennessee, the Tennessee Strategic Highway Safety Committee has taken on the responsibility of developing and implementing this safety plan to reduce fatalities in Tennessee. The team is comprised of the state transportation agencies: Tennessee Department of Transportation (TDOT), Tennessee Department of Safety (TDOS), Governor's Highway Safety Office (GHSO), Federal Highway Administration (FHWA), Federal Motor Carrier Safety Administration (FMCSA), and Nashville Metro Police. The committee reports directly to the Commissioners of Transportation and Safety on their activities and progress.

Emphasis Areas:

I. Improve Decision Making Process and Information Systems
II. Keep Vehicles in the Proper Lane and Minimize the Effects of Leaving the Travel Lane
III. Improve Intersection Safety
IV. Improve Work Zone Safety
V. Improve Motor Carrier Safety
VI. Improve Driver Behavior
VII. Safe Communities
VIII. Legislation
IX. Training Programs

Providing the most efficient and safest highway facilities is of critical importance. The primary "measuring sticks" for safety are reductions in the number of fatalities and injuries that occur because of motor vehicle crashes across the state each year. The State of Tennessee strives to enhance its safety program to ensure highway facilities are as safe as possible through education, engineering, enforcement, and emergency response.

Enhanced Tennessee Emphasis Areas

To achieve the Goal of this Strategic Highway Safety Plan, data driven emphasis areas and strategies to reduce the number of fatal and serious injury crashes have been identified. Comprehensive and coordinated, communicative safety initiatives of Engineering, Enforcement, Education, and Emergency Response will be developed and implemented for each emphasis area. To advance the saving of lives, priority will be given to funding safety initiatives/projects to support the Safety Goal.

I. Improve Decision Making Process and Information Systems

Background

Understanding and making optimal use of information technology is a critical challenge facing Tennessee's Transportation State and local safety professionals. Knowing how, when, where and why traffic crashes have occurred is the foundation of a comprehensive traffic safety analysis system. Crash, traffic, citations, medical, judiciary, and driver records must be available so proper decisions can be made and effective safety policies and projects can be developed and implemented.

Understanding and using integrated traffic records to plan and assess safety programs, as well as leverage critical resources, is needed to protect public safety. Systems currently in place must be assessed and improved to meet the needs of our safety professionals.

A complete traffic records program is necessary for planning (problem identification), operational management or control, and evaluation of a state's highway safety activities. Each state, in cooperation with its political subdivisions, should establish and implement a complete traffic records program. The statewide program should include, or provide for, information for the entire state. This type of program is basic to the implementation of all highway safety countermeasures and is the key ingredient to their effective and efficient management.

Strategies

- Improve timeliness and accuracy of data collection, analysis processes, and systems including the linkage (Oracle) of crash, roadway, driver, medical, Crash Outcome Data Evaluation System (CODES), enforcement, conviction, homeland security data, etc.
- Improve and expand the warehousing and accessibility of safety data.
- Continually update the data definitions in accordance with Model Minimum Uniform Crash Criteria (MMUCC) and D-20.
- Reactivate the Safety Traffic Records Committee (STRC) to include representation from all stakeholders with a need for traffic safety information.
- Implement Traffic and Criminal Software (TraCS) and other systems for the collection of data.
- Expand the local agencies' role and resources to improve safety.
- Provide training on data analysis, updating, definitions, importance, and uses to State and local personnel.
- Provide web access to the media and public on key data and analyses.

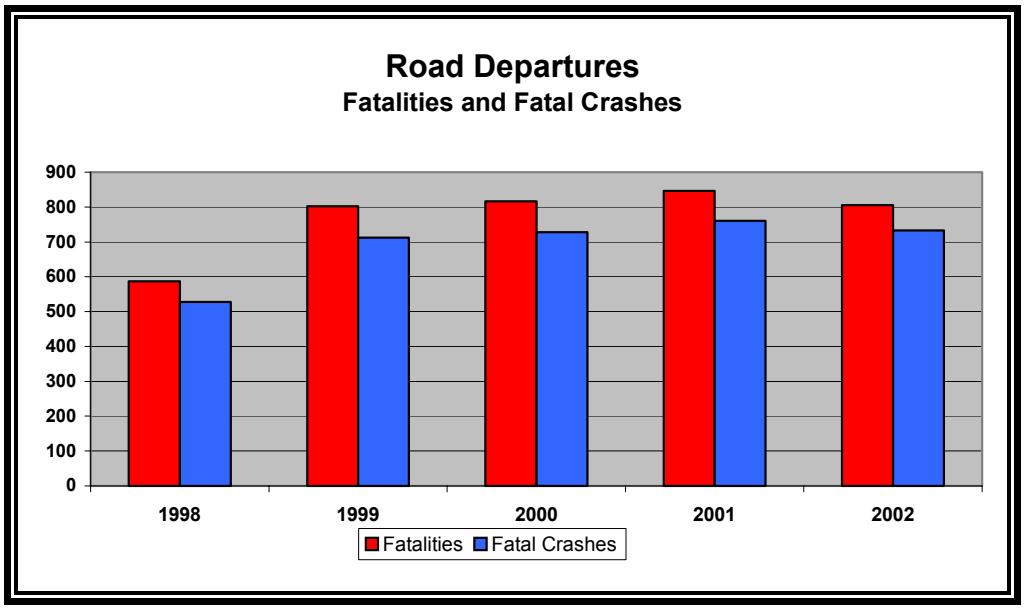
- Improve the exchange of information with the media.
- Independently verify the validity of the data.
- Provide for the development of comprehensive traffic safety public information and education programs that are designed to motivate change in safe driving behaviors.
- Increase cooperation among various public and private organizations that share responsibilities for highway and transportation safety in Tennessee.
- Expand coordination, communication, and cooperation with the MPO's.
- Institutionalize safety conscious planning to include safety criteria in the state and MPO's TIP processes.
- Encourage safety conscious planning at all stages of transportation planning.
- Provide information on the relationship of safety and environmental consideration during the Content Sensitive Design process.
- Streamline and refine the Highway Safety Improvement Program project development and approval process for state and local agency projects.
- Improve public awareness on crucial highway safety issues and actions that the Public may take to improve their personal safety.
- Develop and implement safety-marketing plan.

II. Keep Vehicles in the Proper Lane and Minimize the Effects of Leaving the Travel Lane

Background

Lane departure related crashes accounted for over 800 fatalities, over 65 percent of all the fatalities within the State of Tennessee in 2002. For example, a head-on collision, one of the most serious crash types, occurs when a driver departs the travel lane and collides with an oncoming vehicle. Another lane departure crash is the run-off-road crash that occurs when the driver loses control and the vehicle either collides with a fixed object or overturns. The target crashes are head-on (156*), sideswipe (74*), and run-off-road (574*). * *Number of fatalities in 2002.*

The primary objective of this section is to identify cost effective strategies that reduce unintentional lane departure as well as alert the driver should a departure occur. The secondary objective is to assist the driver in returning to the travel lane safely and minimize the consequences of departure by creating clear zones along the roadside.



Strategies

Identify locations with significant crash history or the potential for drivers to unintentionally leave their travel lane and develop and implement a comprehensive and coordinated initiative of Engineering, Education, Enforcement, and Emergency Response.

- Identify corridors and locations with a disproportionately large number of actual and/or potential for run-off-road and head-on crashes.
- Develop standard operating procedures for the implementation of roadway safety system-wide improvements such as:
  - Centerline rumble strips and stripes
  - Shoulder rumble strips and stripes
  - All Weather Pavement Markings including quality of materials
  - Longitudinal and Median barriers
  - Elimination of road-side hazards
  - Guardrail placement and end treatment upgrades
- Apply the concepts of forgiving roadway design.
- Achieve increased safety through the implementation of the latest designs and technology.

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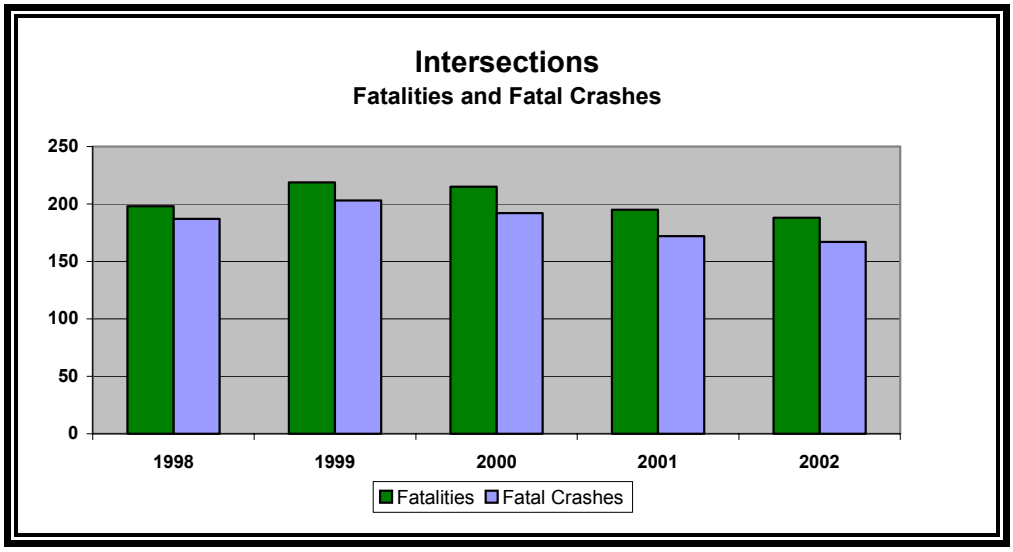
III. Improve Intersection Safety

Background

Intersection-related crashes accounted for 167 fatal crashes resulting in 188 fatalities within Tennessee in 2002. Rural intersections accounted for 73 fatal crashes, of which 12 were at signalized intersections, and 59 were at unsignalized intersections. Urban intersections accounted for 94 fatal crashes, of which 40 were signalized intersections, and 54 were unsignalized intersections. Intersection related crashes accounted for 16 percent of Tennessee's fatalities compared to 21 percent nationally.



Strategies

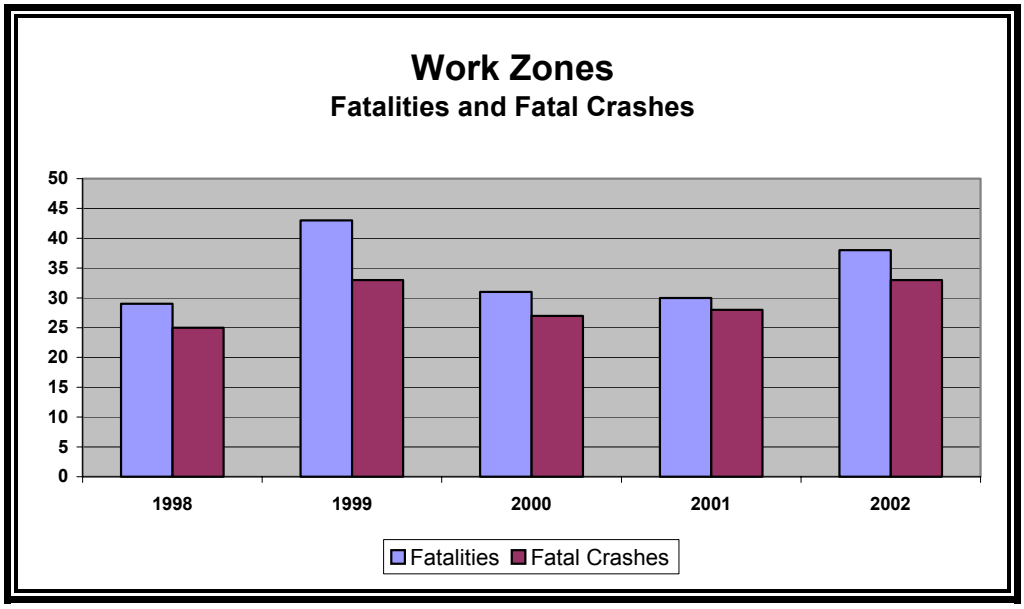
- Identify intersections that qualify for the Hazard Elimination Program based on severity due to the number of fatal and serious injury crashes on the State and local systems.
- Implement cost effective intersection safety improvements that address project specific fatal and serious injury crash data.
- Achieve increased safety through the implementation of the latest designs and technology.
- Improve traffic control at passive highway-rail grade crossings.
- Increase enforcement at intersections and highway-rail grade crossings.

- Provide public information on the importance of compliance with traffic control devices.

IV. Improve Work Zone Safety

Background

Most road construction projects or utility work along Tennessee's Highways involve lane closures or restricted lanes at times. Each year, there are hundreds of work zones which present dangers to workers and drivers alike. During the period of 1998 to 2002 there have been 171 fatalities in Tennessee work zones. Typically, eighty-five percent of those killed in a work zone are drivers or occupants and rear-end crashes (running into the rear of a slowing or stopping vehicle) are the most common kind of work zone crash. Increased public awareness is a key factor in improving work zone safety. With emphasis on several items identified in this section a reduction can be made in the number of fatal crashes in Tennessee's work zones.



Strategies

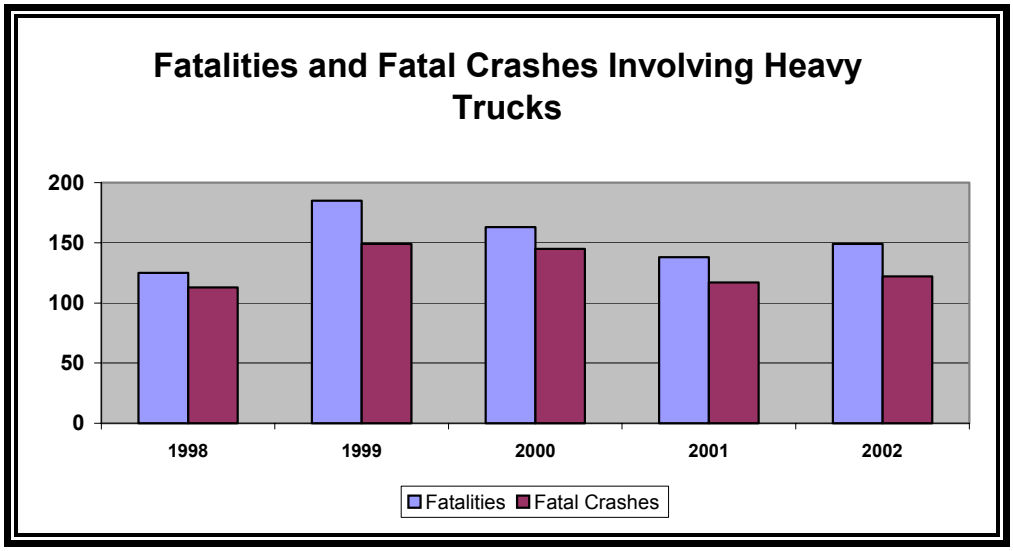
- Provide work zone training and information for public agencies and industry personnel.
- Ensure appropriate work zone traffic control including pavement marking and signing.
- Prepare and air Public Service Announcements.

- Provide practices and policies to improve the safe travel of motor carriers in work zones.
- Achieve increased safety through the implementation of innovative designs and technology.
- Provide funding to state and local law enforcement to help control speeding in major work zones.

V. Improve Motor Carrier Safety

Background

Tennessee's crash data shows over representation of crashes in certain areas of the State. Because of the inaccuracy of fiscal year 2002 data in Motor Carrier Management Information System (MCMIS), the latest available and reliable data from fiscal year 2001 were used to show trends of overall crashes. For overall crashes, MCMIS shows 1,348 in 1998, 1,439 in 1999, 1,468 in 2000, and 1,404 in 2001. During this period approximately 50% of all Commercial Motor Vehicle (CMV) crashes occurred within or around the four (4) metropolitan areas of Nashville (Davidson County); Memphis (Shelby County); Chattanooga (Hamilton County), and Knoxville (Knox County). In addition, the Fatality Accident Reporting System (FARS) data for the years 1998 through 2002 were used to determine trends for fatalities and fatal crashes.



Strategies:

- Combine Safety Education efforts

- Manage problem drivers more effectively
- Step up targeted enforcement initiatives
- Provide technological infrastructure and solutions
- National and State Specific Program Elements
  - I. Driver /Vehicle Inspections
  - II. Compliance Reviews
  - III. Traffic Enforcement
  - IV. Public Education and Awareness
  - V. Data Collection
  - VI. School Bus Program (State Specific)
  - VII. Drug and Alcohol Interdiction (State Specific)
  - VIII. Hazardous Materials (State Specific)
  - IX. Motor Coach Program (State Specific)
  - X. CMV Seat Belt Usage

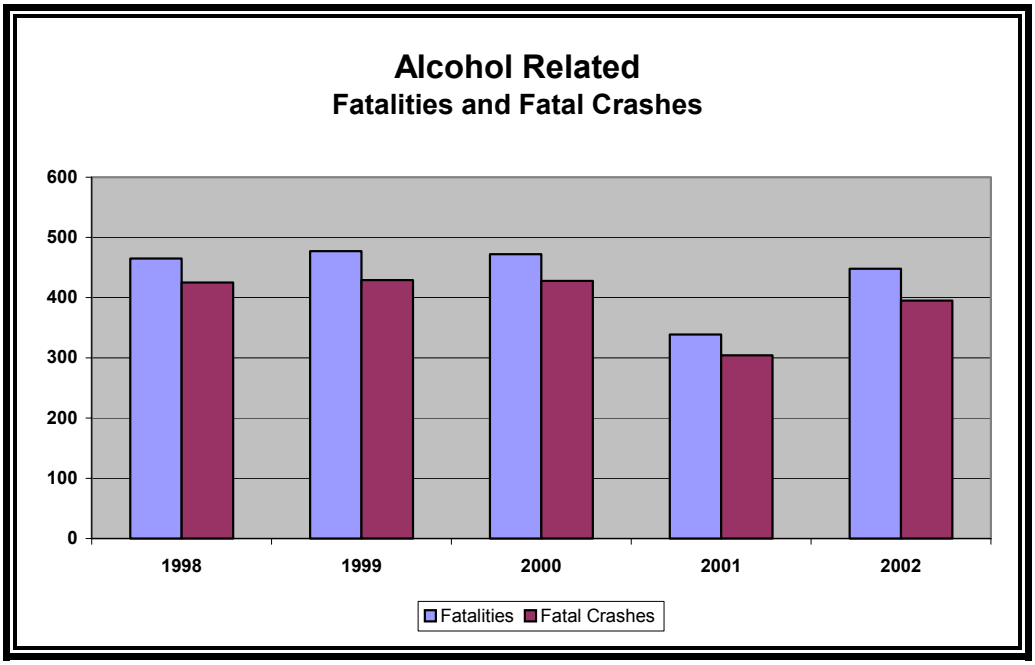
VI. Improve Driver Behavior

Background

Addressing driver behavior is a critical factor in reducing fatal and serious injury crashes. In 2002, of the 1,175 fatalities, 448 deaths were alcohol related, 293 deaths involved driving too fast or exceeding the speed limit, and 654 were not wearing safety devices. The statistics also show that a large number of fatal crashes are due to the drivers' impaired condition or errors. Therefore, enforcement and education should be emphasized in the corresponding strategies.

Alcohol

Alcohol related crashes and fatalities have had a significant impact on the lives of our citizens and economy of our state. Data from the FARS show that in 2002, 448 or 38% of all traffic fatalities for drivers were alcohol related.



Strategies:

- To develop public information and education campaigns targeting youth, adults, and those engaged in high risk driving behaviors. Venues for these activities include print and electronic media as well as classroom instruction.

- To coordinate comprehensive sobriety checkpoints and saturation blitzes statewide.

- To coordinate conference and training programs for law enforcement officers, prosecutors, and judges to facilitate in the detection, arrest, adjudication and conviction of alcohol and/or drug impaired drivers.

- To coordinate DUI enforcement projects that provide highly visible patrols and selective enforcement methods utilizing up to date field sobriety techniques.

- To support efforts to implement a statewide uniform traffic DUI tracking system incorporating all law enforcement agencies.

- To support efforts to establish linked data bases with the ability to track offenders or citations from arrest/issuance through sanction completion or dismissal.

- To form an Alcohol Countermeasures Advisory Council statewide or by region.
- To pilot a community wide alcohol countermeasures intervention.
- To establish a statewide tracking system for Blood Alcohol Concentration (BAC) levels of offenders.

Aggressive Driving

Vented anger displayed through, excessive speeding, changing lanes frequently without signaling, following too closely, driving on shoulders to pass, driving across marked barriers, shouting or gesturing at other drivers, and stress created by traffic congestion are manifestations of aggressive driving. “Speeding and Recklessness”

Fatal Crashes				
Year	**Speeding**	**Failure to Yield**	**Following too Closely**	**Reckless Driving**
1996	**287**	**129**	**25**	**87**
1997	**268**	**172**	**18**	**84**
1998	**258**	**151**	**18**	**99**
1999	**287**	**121**	**20**	**110**
2000	**263**	**112**	**15**	**115**

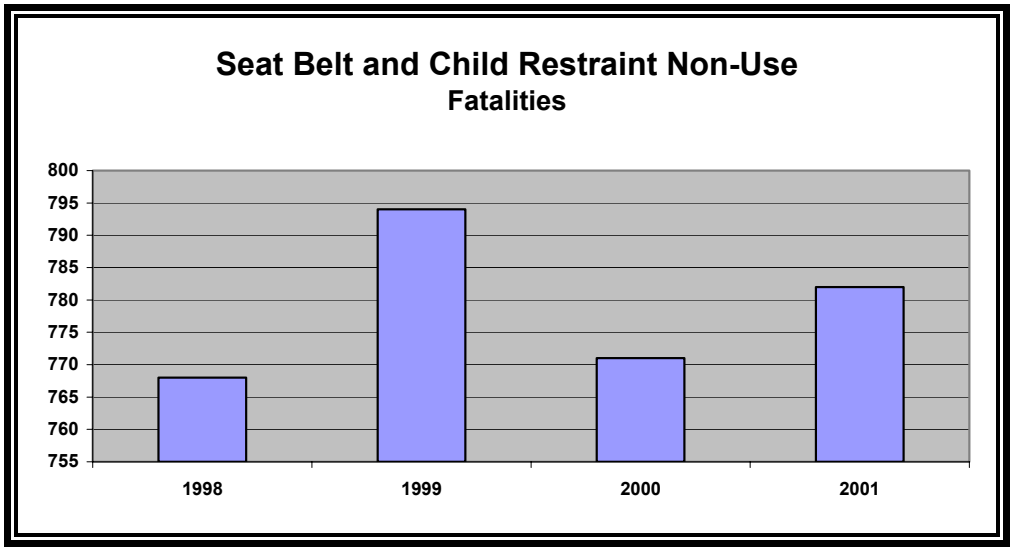
Strategies:

- Develop and implement enforcement programs aimed at aggressive driving in high frequency areas.
- Encourage public information and education programs to help define and inform the public about the dangers of aggressive driving.
- Evaluate the adoption of a statutory traffic law through the legislative process to clearly define aggressive driving for enhanced enforcement efforts.
- Evaluate the adoption of a uniform citation for enforcement that will serve as a tracking mechanism for courts and traffic records analysis.

Occupant Protection

The 2001 Safety Belt Use Survey revealed an “All Vehicle” Restraint Usage Rate of 68.31%, an increase of 9.33% over the 2000 level, according to the 2001 Statewide Observed Use Survey conducted by the University of Tennessee Transportation Center.

Drivers and occupants must become more aware of the importance of using safety belts, properly seating children in child passenger safety seats and air bag equipped vehicles, as well as the proper use of vehicle safety restraints.



Strategies:

- Develop targeted public information and education campaigns addressing critical usage areas; i.e., vehicle categories, socioeconomic groups and youth.

- Provide training and technical assistance on correct use of child passenger safety seats through law enforcement agencies, emergency medical services personnel, health care providers, healthcare educators, pediatric nurses, foster care and human service social workers, child care providers, firefighter personnel, rural transportation supervisors and highway safety advocacy representatives.

- To coordinate and promote child passenger safety (CPS) initiatives: i.e., 12 CPS technician classes and 200-child safety seat checkpoints in FFY 2005.

Increase monitoring of seat belt usage and provide advice on usage to both the traveling public and CMV drivers.

Young Drivers

Drivers under the age of 20 (ages 15-19) continue to be over-represented in fatal and injury crashes. In 2002, drivers ages 15-20 were involved in 257 fatal crashes. The five major Contributing Factors for youthful drivers' fatal crashes were:

1. Speeding
2. Wrong Side of Road
3. Failure to Yield
4. Reckless Driving
5. Drinking

Strategies:

- Provide high-risk driver education programs targeting drivers age 15 – 21 with injury prevention, occupant protection, DUI, speed, and attention messages.

- Develop public information and education campaigns with activities targeting behaviors that endanger younger drivers. Selective targeting of ages with tailored messages.

- Promote youth oriented traffic patrols.

- Reduce minor's access to alcohol and other drugs, including vendor education and enforcement of underage sale laws.

- Address college campus impaired driving and other high risk transportation related behavior issues.

- Collaborate with other agencies and organizations that address youth alcohol and other drug problems i.e., Select Committee on Children and Youth, Tennessee Council of Juvenile and Family Court Judges.

- Host elementary, high school and parent traffic safety conferences that provide traffic safety awareness education, injury prevention education, advocacy education, and training in educational strategies.

- Disseminate videos, curriculum materials, and posters to classroom teachers and schools.

- Participate with national legislative advocacy groups such as Mothers Against Drunk Driving (MADD) and National Student Safety Program (NSSP).

- Develop an active youth advocacy group for the State.

VII. Safe Communities

Background

In 2002, 1,175 fatalities occurred on Tennessee's roads. Deaths and injuries caused by traffic crashes are a serious public health concern. For 2002, the US Department of Transportation estimates that the annual economic loss due to traffic crashes in Tennessee was over $4.6 billion.

Many of these injuries represent extended rehabilitation care costs and loss of productivity. Fatalities are only a small part of the total injury picture. For each injury-related death, there are 19 injury hospitalizations and over 300 injuries that require medical attention. Each year, one in four Americans will have a potentially preventable injury serious enough to require medical care. These injuries account for almost 10% of all physician office visits and 38% of all emergency department visits. For an individual, these injuries vastly diminish quality of life. For society, injuries pose a significant drain on the health care system incurring huge treatment, acute care, and rehabilitation costs. The substantial impact within the local community relative to medical costs, lost wages, insurance costs, taxes, police, fire and emergency services, legal and court costs as well as property damage are significant.

Strategies:

- Safe Communities will address identified highway safety problems based on crash and injury data specific to each community.

- Safe Communities will review and prioritize local highway safety needs.

- Streamline the project development and approval process for state and local agency projects.

- Assist local agencies to implement highway safety improvement projects.

- Inform local agencies on the importance and proper use of the Manual on Uniform Traffic Control Devices.

- Inform local officials on the importance of standards and policies and liability issues when standards and policies are not followed.

- Establish system to handle safety issues identified by the public on a seamless basis, helping the Public cut through the “bureaucratic silos.”

- Safe Communities will develop a comprehensive plan that addresses specific activities for reducing the injury rate for high-risk groups within each community.

- The Safe Communities will be organized within each interested community and will include members from engineering, emergency response, law enforcement, employers, education professionals, health care professionals, civic leaders and citizen groups.

- The GHSO Safe Communities coordinator will provide specialized training for each of the Safe Communities coordinators in the local communities. This will include not only the components of the program but intensive training on data collection.

- The GHSO Safe Communities coordinator will host a second Safe Communities workshop and invite a new group of 10 interested communities for training.

- The GHSO Safe Communities coordinator will host two Data Template workshops to educate on the data collection process.

- Analyze crash data and work with local agencies to establish corridor safety improvement projects.

- Through the establishment of the GHSO web page, increase the awareness and progress of the state programs for each Safe Community Project Director.

- Increase the use of networking the Safe Communities coordinators for each local community via conference calls, e-mail, quarterly, or bi-annual meetings, etc.

- Incorporate the ninety-five (95) existing Health/Wellness Councils in Tennessee to help in the implementation of new Safe Communities initiatives.

- Develop state data sources to ease the process of data collection for Safe Communities programs.

VIII. Legislation

Background

Legislation that was passed in 2004 by the Tennessee General Assembly included a new Primary Seat Belt law that went into effect July 1, 2004. In addition to primary enforcement, this bill added the following definitions to the seat belt law: prohibits any passenger from riding anywhere in a motor vehicle other than in a passenger seat position; requires all passengers, and not just front seat passengers, to wear safety belts; directs $20.00 of the proceeds of the fines from violations, rather than full amount, to the division of vocational rehabilitation; mandates that violators receive points on driving record; and adds to the list of circumstances excluded from the act.

Booster seat legislation was passed by the Tennessee General Assembly in 2003 that also went into effect July 1, 2004. Booster seat is now required for children aged 4 years through 8 years and less than 5 feet tall.

Strategies

Pursue and support legislation in the following areas:

- Open Container Law
- Mandatory BAC testing for all fatalities per the National Committee on Uniform Traffic Laws and Ordinances (NCUTLO) model law
- Multiple BAC testing
- Clean-up DWI Laws
- Refine Aggressive Driving definition
- Move Over for Emergency Vehicles
- Refine work zone speed definition and fines
- Vehicle Safety Inspections
- Private mailboxes and other hazardous obstacles on the ROW

IX. Training Programs

Background

The Tennessee Law Enforcement Training Academy, as well as the four metropolitan area law enforcement academies, is overwhelmed with requests from law enforcement agencies for specialized traffic crash training courses. The need exceeds the resources. Due to overcrowded schedules as well as local agency funding resources, courses are unavailable on a regularly scheduled basis, the availability of specialized training within a geographic region is lacking in scope.

Due to emerging technologies and processes, additional safety training in intersection safety improvements, roadside safety design, safety data analysis and new approaches to highway safety design will be needed for State and local engineers, technicians, and highway personnel.

Strategies:

- To conduct a needs assessment survey for municipal and county law enforcement agencies to determine specialized traffic enforcement training courses.
- To conduct three regional Law Enforcement Management Training Programs for First-Line Supervisors.
- To offer more regional based traffic courses to meet the demand for specialized traffic enforcement training.
- Conduct training for local and State engineering on integration of safety into the project development process (planning, design, construction, maintenance and operations) of the highway system.

Conclusion

Implementations of these strategies will be guided and monitored by the Tennessee Strategic Highway Safety Committee with reports to the Commissioners of Transportation and Safety.

Glossary of Acronyms and Terms (Rev. 1)

Administrative per se: This term describes the laws establishing an administrative process so that the responsible state agency can suspend a driver for a BAC violation even if the court does not convict him or her on the corresponding DUI offense.

Alcohol Involvement: *Alcohol involved fatal crashes and fatalities reflect those where a driver or a non-occupant with a positive alcohol result was involved or where the investigating officer reported alcohol involvement.

AASHTO: American Association of State Highway and Transportation Officials.

BAC: Blood Alcohol Concentration is measured as a percentage by weight of alcohol in the blood (grams/milliliter). A positive BAC level (0.01 g/ml and higher) indicates that alcohol was consumed by the person tested. In Tennessee, a BAC level of 0.08 g/ml or more indicates that the person was intoxicated.

CDL: Commercial Driver License

Child Restraint Device: an object or system used by children in a vehicle to prevent or minimize injury and to prevent ejection during a crash. Common objects include child safety seats, booster seats, and seat belts.

CMV: a Commercial Motor Vehicle is any motor vehicle operated in intrastate, interstate, or foreign commerce

CODES: the Crash Outcome Data Evaluation System is a collaborative approach to generating medical and financial outcome information relating to motor vehicle crashes and using this outcome-based data as the basis for decisions related to highway traffic safety.

Collision: a road vehicle crash other than an overturning crash in which the first harmful event is a collision of a road vehicle in transport with another road vehicle, other property, animal or pedestrian.

Construction/Maintenance Zone: an area, usually marked by signs, barricades, or other devices indicating that highway construction or highway maintenance activities are ongoing.

CSD: Content Sensitive Design is a collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources, while maintaining safety and mobility.

Crash: an event that produces injury and/or property damage, involves a motor vehicle in transport, and occurs on a trafficway or while the vehicle is still in motion after running off the trafficway

Crash Rate: the number of crashes per million vehicle miles.

CVC: a Commercial Motor Vehicle involved crash

D-20: a reference for the Data Element Dictionary for Traffic Records Systems which provides a common set of coding instructions for data elements related to highway safety, driver licensing, and vehicle registration

Driver's License Suspension/ Revocation/ Cancellation: the temporary loss of driving privileges, which may be regained after the requirements for reinstating the privileges are met.

DUI: driving under the influence of alcohol or drugs. A crime that can result in fines, suspension or revocation of driver's license, or jail time.

DWI: Driving While Intoxicated refers to driving while impaired by alcohol or drugs. May be used interchangeably with DUI .

DWS, DWR, or DWU: these acronyms refer to “driving while suspended,” “driving while revoked,” and “driving while unlicensed.” The term is used to denote the DWS, DWR, or DWU citation (a moving violation) and/or the license status of the driver at the time of a crash or other event.

Economic Loss: the total monetary cost of a motor vehicle crash, including continuing or future expenses to be incurred because of the crash. Included in these losses are lost productivity, medical costs, legal and court costs, emergency service costs, insurance administration costs, travel delay, property damage, and workplace losses.

Ejection: Refers to occupants being totally or partially thrown from the vehicle as a result of an impact or rollover

FARS: the Fatality Analysis Reporting System (FARS) contains data on a census of fatal traffic crashes within the 50 States, the District of Columbia, and Puerto Rico. To be included in FARS, a crash must involve a motor vehicle traveling on a trafficway customarily open to the public and result in the death of a person (occupant of a vehicle or a non-occupant) within 30 days of the crash.

Fatal Crash: a police-reported crash involving a motor vehicle in transport on a trafficway in which at least one person dies within 30 days of the crash.

Fatal Injury: any injury that results in death within 30 days of the crash.

Fatality: any death resulting from a fatal injury.

Fatality Rate: the number of persons killed per 100 million vehicle miles traveled.

FMCSA: the Federal Motor Carrier Safety Administration is an administration within the US Department of Transportation whose primary mission is to reduce crashes, injuries, and fatalities involving large trucks and buses

FHWA: Federal Highway Administration

GDL: Graduated Driver License

GHSO: Governor’s Highway Safety Office

GIS: a Geographic Information System is a collection of computer software, hardware, data, and personnel used to store, manipulate, analyze, and present geographically referenced information.

GPS: a Global Positioning System is a Government-owned system of 24 Earth-orbiting satellites which transmit data to ground-based receivers and used to determine the precise position of vehicles on the ground. Provides extremely accurate latitude/longitude ground position.

GVWR: the Gross Vehicle Weight Rating is the maximum rated capacity of a vehicle, including the weight of the base vehicle, all added equipment, driver and passengers, and all cargo loaded into or on the vehicle. Actual weight may be less than or greater than GVWR

High-Risk Driver: a driver persistently engaging in a range of behaviors such as impaired driving, non-use of seat belts, speeding and running red lights that increase their probability of being involved in collisions resulting in fatalities and/or serious injuries.

Highway: a public way for purpose of vehicular travel, including the entire area within the right-of-way. (Urban areas – highway or street, in rural areas – highway or road).

Ignition Interlock: this is a device that renders a car inoperative unless one or more preconditions are met. In DUI driver-control programs, the typical ignition interlock device requires the driver to give a breath sample which is then analyzed for the presence of alcohol. If there is alcohol present (above some minimum threshold value), the car will not start. Other variations are used to ensure that an individual does not operate the vehicle, or is the only operator of a vehicle.

Incident: an event occurring by chance or arising from unknown causes. For example, unawareness. An unexpected happening causing loss or injury which is not due to any fault or misconduct on the part of the person injured but from the consequences.

Injury: bodily harm to a person.

Injury Crash: a police-reported crash that involves a motor vehicle in transport on a trafficway in which no one died but at least one person was reported to have: (1) an incapacitating injury; (2) a visible but not incapacitating injury; (3) a possible, not visible injury; or (4) an injury of unknown severity.

Intersection: an area that contains a crossing or connection of two or more roadways not classified as driveway access and within the prolongation of the lateral curb lines. If no curb exists, it is the area within the extension of the lateral boundary lines of the roadway of two joined traffic ways.

Interstates: limited access divided facilities of at least four lanes designated by the Federal Highway Administration as part of the Interstate System.

MADD: Mothers Against Drunk Driving

MCMIS: Motor Carrier Management Information System. Operated and maintained by FMCSA, MCMIS contains information on the safety fitness of commercial motor carriers and hazardous material (HM) shippers subject to the Federal Motor Carrier Safety Regulations (FMCSRs) and the Hazardous Materials Regulations (HMRs). MCMIS is a collection of safety information including state-reported crashes, compliance review and roadside inspections results, enforcement data, and motor carrier census data. The Crash Profiles module uses the MCMIS Crash and Census data to compile and publish the State Profiles and several National reports.

Minimum drinking age and zero tolerance laws: make it illegal for anyone under the age of twenty-one to drink alcohol. If someone under age twenty-one is suspected of drunk driving, a BAC of only 0.01 or 0.02 may be enough to revoke the person's license in many states. All states have zero tolerance laws.

MMUCC: Model Minimum Uniform Crash Criteria are a voluntary set of guidelines that help states collect consistent, reliable crash data that are more effective for identifying traffic safety problems, establishing goals and performance measures, and monitoring the progress of programs.

MPO: Metropolitan Planning Offices Organizations are created for each “urbanized area” with a population of more than 50,000 people to carry out the transportation planning process required by federal laws and regulations (Title 23 USC 134). MPOs, which include representatives of all local governments, have been established in nine urbanized areas in Tennessee—Bristol, Chattanooga, Clarksville, Jackson, Johnson City, Kingsport, Knoxville, Memphis, and Nashville.

Motor Carrier: an individual, association, corporation, or other legal entity that controls, operates, or directs the operation of one or more commercial motor vehicles that transport persons or cargo over a road or highway in this state.

MUTCD: Manual of Uniform Traffic Control Devices defines the standards used by road managers nationwide to install and maintain traffic control devices on all streets and highways.

NCUTLO: The National Committee on Uniform Traffic Laws and Ordinances is a private, non-profit membership organization dedicated to providing uniformity of traffic laws and regulations through the timely dissemination of information and model legislation on traffic safety issues

NHTSA: the National Highway Traffic Safety Association, an organization within the US, Department of Transportation is responsible for reducing deaths, injuries and economic losses resulting from motor vehicle crashes. This is accomplished by setting and enforcing safety performance standards for motor vehicles and motor vehicle equipment, and through grants to state and local governments to enable them to conduct effective local highway safety programs.

Night: from 6 p.m. to 5:59 a.m.

NSSP: National Student Safety Program

Open container laws: prohibit drivers and passengers from having an alcoholic beverage open in a vehicle. The federal government has encouraged all states to enact open container laws by linking highway funding to the implementation of such laws. So far, about thirty states have adopted open container laws.

Property-Damage-Only Crash: a police-reported crash involving a motor vehicle in transport on a trafficway in which no one involved in the crash suffered any injuries.

Reckless Driving: operating a motor vehicle with a willful and wanton disregard for the safety of persons or property.

Rollover: a rollover is defined as any vehicle rotation of 90 degrees or more about any true longitudinal or lateral axis. Includes rollovers occurring as a first harmful event or subsequent event

ROW: Right of Way

Rumble Strips: rumble strips are raised or grooved patterns on the road shoulder that provide both an audible warning and physical vibration to alert drivers that they are leaving the road.

SADD: Students Against Drunk Driving

Saturation Blitzes: heavy enforcement with checkpoints and roving saturation patrols and extensive publicity. Example “Click It of Ticket” enforcement blitzes, in July and November, respectively.

Sobriety Checkpoints: the purpose of this is to provide guidelines for the physical construction and operation of a sobriety checkpoint in order to maximize the deterrent effect and increase the perception of “risk of apprehension” of motorists who would operate a vehicle while impaired by alcohol or other drugs.

Trafficway: any road, street, or highway open to the public as a matter of right or custom for moving persons or property from one place to another.

TDOS: Tennessee Department of Safety

TDOT: Tennessee Department of Transportation

TIP: Transportation Improvement Program

TRACS: the Traffic and Criminal Software (TraCS) is application software that, combined with laptop computers, one or more PCs in a central office, and data communications, provides officers with all of the functionality needed to record and retrieve incident information, including crash, criminal reporting, traffic citation, and DWI forms wherever and whenever an incident occurs using a map-based accident and incident location system.

Traffic Incident Management: the planned and coordinated program process to detect, respond to and remove traffic incidents and restore traffic capacity as safely and quickly as possible. This coordinated process involves a number of public and private sector partners including: Law Enforcement, Fire and Rescue, Emergency Medical Services, Transportation, Public Safety Communications, Emergency Management, Towing and Recovery Hazardous Materials Contractors, and Traffic Information Media.

Uniform Citation: it is the universal citation system when it determines that there is a greater consensus among citation experts and national legal organization regarding the components and from of a universal citation system.

Vehicle Safety Restraints: a system or device for restraining an occupant in a vehicle to prevent or minimize contact with the vehicle interior components or and prevent ejection during a crash. Common systems and/or devices include seatbelts, child safety seats, and airbags.

VMT: Vehicle Miles of Travel represent the total number of vehicle miles traveled by motor vehicles on public roadways within Tennessee.

Work Zone: the area between the first advance warning sign and the point beyond the utility or construction zone where traffic is no longer affected. See construction/maintenance zone.

Zero Tolerance: In cases of DUI, the right to convict minors with virtually any amount of alcohol in the bloodstream. In many cases, this amounts to a BAC of .01%, much less than the legal limit for adults.